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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,530	02/24/2006	Sturla Lutnaes	956315	6019

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EXAMINER	
SHOLEMAN, ABU S	

ART UNIT	PAPER NUMBER
2437	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/569,530	LUTNAES, STURLA	
	Examiner	Art Unit	
	ABU SHOLEMAN	2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02/24/2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is a responsive to communication (s) filed on 08/04/2009.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1,-6, 9-13, and 16-24 are rejected under 35 U.S.C.103 (a) as being unpatentable over Turkboylari (20030140238) (hereinafter Turkboylari) in view of Hodder et al (US 2004/0255141).

As per claim 1, Turkboylari discloses

"copying security data from the non-volatile memory to the working memory, wherein the security data is to be write-protected" as (on page 3, [0026], "boot loader sequence typically loads user code from non-volatile memory to into RAM", user code can view as a security data and this data is write protected by a write-protection function);

"activating a blocking function for the security data in the working memory, wherein activating is triggered by the copying being made to the working memory" as (on page 3, [0026], "security logic ensures that the authenticated code is not further

altered after it has been loaded into system RAM" when code is loaded into RAM then write -protection function get activated for blocking any alteration into a portion of volatile memory RAM);

"monitoring all communication with the working memory" as (on page 3, [0026], security logic ensures (i.e. monitoring) that there is not any alteration after upload any code in RAM);

"blocking all write attempts to the copied security data stored in the working memory according to the blocking function, wherein at least activating a blocking function" as (on page 3, [0026], "security logic ensures that the authenticated code is not further altered after it has been loaded into system RAM" when code is loaded into RAM then write -protection function get activated for blocking any alteration into a portion of volatile memory RAM and , write-protection function is a blocking function and system security is maintained by ensuring that security-sensitive data and code are protect by write-protected function when authentication code for secure applications to be loaded into RAM upon reset or power-up) ,

Turkboylari fails to disclose "monitoring communication and blocking write attempts are performed independently of a central processing unit of the electronic data processing device, such that the central processing unit cannot manipulate the security data".

However, Hodder discloses "monitoring communication and blocking write attempts performed independently of a central processing unit of the electronic data processing device, such that the central processing unit cannot manipulate the security

data" as (par 0041-0052, numeral 36 , write-protection circuit which is stand alone process to inhibit writing data on numeral 38 fiscal data memory [working memory]).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the teaching of Turkboylari by including a stand-alone write -protection circuit based on the teachings of Hodder because this would improve the integrity of electronic data.

As per claim 2, Turkboylari in view of Hodder disclose " wherein an area of the security data in the non-volatile memory is pre-defined and pre-stored in a device for blocking write attempts and used at least in relation to activating a blocking function" as (Turkboylari, Fig.1, broad interpretation, numeral 15 and numeral 12 holds data in memory cell).

As per claim 3, Turkboylari in view of Hodder disclose " copying data comprises copying only the security data from the non-volatile memory to the working memory independently of the central processing unit of the data processing device and coping any further data under the control of the central processing unit of the device" as (Turkboylari, Fig.1, broad interpretation, copying data from numeral 15 to numeral 12 and Hodder, Fig.2, numeral 36, write-protection circuit is an independent from numeral 22 CPU).

As per claim 4, Turkboylari in view of Hodder disclose "wherein an area of the security data in the non-volatile memory and an area for storage of the security data in the working memory are pre-defined and wherein activating a blocking function is triggered by the copying being made to the pre-defined area for storage of the security data in the working memory and the blocking function is activated f or that area of the working memory" (Turkboylari, and Fig .1, par 0034, write-protect registers 34 and copy authentication data from numeral 15 to numeral 12).

As per claim 5, Turkboylari in view of Hodder disclose "copying all data from the non-volatile memory to the working memory under the control of the central processing unit of the device" as (Turkboylari, on page 3, [0026], loads user code from non-volatile memory to RAM and Schu, Fig 3, write signal 210a writes into RAM 204. it does not write in write locked RAM 206).

AS per claim 6, Turkboylari in view of Hodder disclose " wherein an area of the security data in the non –volatile memory and wherein activating a blocking function is triggered by a first detection of copying of security data in the non-volatile memory to an area of the working memory and blocking function is activated for that area of the working memory wherein an area of the security data in the non-volatile memory is pre-defined area " as (Turkboylari, on page 3, [0026], "security logic ensures that the authenticated code is not further altered after it has been loaded into system RAM"

when code is loaded into RAM then write -protection function get activated for blocking any alteration into a portion of volatile memory RAM).

As per claim 9, this claim is directed to a device and contains limitations that are substantially similar to those recited in claim 1 above, and accordingly is rejected for similar reasons.

As per claim 10, this claim is directed to a device and contains limitations that are substantially similar to those recited in claim 2 above, and accordingly is rejected for similar reasons.

As per claim 11, this claim is directed to a device and contains limitations that are substantially similar to those recited in claim 3 above, and accordingly is rejected for similar reasons.

As per claim 12, this claim is directed to a device and contains limitations that are substantially similar to those recited in claim 4 above, and accordingly is rejected for similar reasons.

As per claim 13, this claim is directed to a device and contains limitations that are substantially similar to those recited in claim 5 above, and accordingly is rejected for similar reasons.

As per claim 16, Turkboylari in view of Hodder disclose wherein it is implemented in hardware as (Turkboylari, Fig. 1 and Schu, Fig. 3).

As per claim 17, this claim is directed to an electronic data processing device and contains limitations that are substantially similar to those recited in claim 1 above, and accordingly is rejected for similar reasons.

As per claim 18, this claim is directed to an electronic data processing device and contains limitations that are substantially similar to those recited in claim 2 above, and accordingly is rejected for similar reasons.

As per claim 19, this claim is directed to an electronic data processing device and contains limitations that are substantially similar to those recited in claim 3 above, and accordingly is rejected for similar reasons.

As per claim 20, this claim is directed to an electronic data processing device and contains limitations that are substantially similar to those recited in claim 4 above, and accordingly is rejected for similar reasons.

As per claim 21, this claim is directed to an electronic data processing device and contains limitations that are substantially similar to those recited in claim 5 above, and accordingly is rejected for similar reasons.

As per claim 22, this claim is directed to an electronic data processing device and contains limitations that are substantially similar to those recited in claim 6 above, and accordingly is rejected for similar reasons.

As per claim 25, Turkboylari in view of Hodder discloses “wherein the device for blocking write attempts is implemented in hardware” as (Turkboylari, Fig. 1 and Schu, Fig. 3).

As per claim 26, Turkboylari in view of Hodder disclose “wherein the device is a portable communication device” as (Turkboylari, [0005]).

As per claim 27, Turkboylari in view of Hodder disclose "wherein the device is a cellular phone" as (Turkboylari, [0005]).

4. Claims 7, 14, and 23 are rejected under 35 U.S.C.103 (a) as being unpatentable over Turkboylari (20030140238) (hereinafter Turkboylari) in view of Hodder et al (US 2004/0255141) (hereinafter Hodder) and further in view of Aichelmann,Jr. (US 5166903) (hereinafter Aichelman).

As per claim 7, Turkboylari in view of Hodder disclose all the limitations set forth above, but fail to explicitly disclose "wherein the blocking function comprises changing the destination address of the data transferred to the working memory".

However, Aichelmann discloses wherein the blocking function comprises changing the destination address of the data transferred to the working memory" as (column 9, lines 8-33, data buffer performs blocking function altering data port [destination address]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to implement the claimed invention by modifying the method of Turkboylari in view of Hodder, based on the teaching of Aichelmann, because doing so, would provide a protected memory.

As per claim 14, this claim is directed to a device and contains limitations that are substantially similar to those recited in claim 7 above, and accordingly is rejected for similar reasons.

As per claim 23, this claim is directed to an electronic data processing device and contains limitations that are substantially similar to those recited in claim 7 above, and accordingly is rejected for similar reasons.

5. Claims 8, 15, and 24 are rejected under 35 U.S.C.103 (a) as being unpatentable over Turkboylari (20030140238) (hereinafter Turkboylari) in view of Hodder et al (US 2004/0255141) (hereinafter Hodder) and further in view of Starr (US 4574350) (hereinafter Starr).

As per claim 8, Turkboylari in view of Hodder disclose all the limitations set forth above, but fail to explicitly disclose “disconnecting a debugging unit at least when copying the security data to the working memory and reconnecting the debugging unit when the blocking function has been activated".

However, Starr discloses “disconnecting a debugging unit at least when copying the security data to the working memory and reconnecting the debugging unit when the blocking function has been activated” as (column 5, lines 48-60, lock unit performs locking [reconnect] and unlocking [disconnect] on memory , examiner interpretation [blocking function activation and deactivation on memory]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to implement the claimed invention by modifying the method of

Turkboylari in view of Hodder, based on the teachings of Starr, because doing so, would improve security in memory.

As per claim 15, this claim is directed to a device and contains limitations that are substantially similar to those recited in claim 8 above, and accordingly is rejected for similar reasons.

As per claim 24, this claim is directed to an electronic data processing device and contains limitations that are substantially similar to those recited in claim 8 above, and accordingly is rejected for similar reasons.

Examiner Notes

6. Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

7. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See MPEP 707.05(c).

8. The following reference teaches execution of trial data.

US 20030135706

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abu Sholeman whose telephone number is (571)270-73144. The examiner can normally be reached on Mon-Thurs 7:30 am-5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571)-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ABU SHOLEMAN/

Examiner, Art Unit 2437

/Emmanuel L. Moise/

Supervisory Patent Examiner, Art Unit 2437